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PPLICATION NO.	HILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09 537,906	03-28-2000	Augustine J. Caffrey	LIT-P1-553	5007	
75	90 07 28 2003				
Alan D Kirsch			EXAMINER		
Bechtel BWXT PO Box 1625	Idaho LLC		LEE, SHUN K		
Idaho Falls, ID	83415-3899		ART UNIT	PAPER NUMBER	
			2×7×		
			DATE MAILED: 07/28/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

				De				
	Application No	0.	Applicant(s)					
	09/537,906		CAFFREY ET AL.					
Office Action Summary	Examiner		Art Unit					
	Shun Lee		2878					
→ - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, ho by within the statutory m will apply and will expire, cause the application	wever, may a reply be time inimum of thirty (30) days e SIX (6) MONTHS from the to become ABANDONED	ly filed will be considered timel te mailing date of this c (35 U.S.C. § 133).	ly. ommunication.				
1) Responsive to communication(s) filed on 12	May 2003 .							
2a) This action is <b>FINAL</b> . 2b) T	his action is non-	final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims								
4) Claim(s) 1,18-26 and 28-41 is/are pending in	the application.							
4a) Of the above claim(s) is/are withdra	awn from conside	eration.						
5) Claim(s) 1,18-22,24-26,28-30,32-34 and 38-4	11 is/are allowed.							
6)☐ Claim(s) is/are rejected.								
7)								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10)⊡ The drawing(s) filed on <u>28 March 2000 &amp; 10 May 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
<ul><li>3. Copies of the certified copies of the price application from the International B</li><li>* See the attached detailed Office action for a list</li></ul>	Bureau (PCT Rule	e 17.2(a)).		l Stage				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) $\square$ The translation of the foreign language posts) $\square$ Acknowledgment is made of a claim for domest								
Attachment(s)								
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	4) [ 5) [ 6) [	Interview Summary Notice of Informal P Other:	(PTO-413) Paper No atent Application (P					

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Art Unit: 2878

#### **DETAILED ACTION**

### Claim Objections

1. Claims 23, 31, and 35-37 are objected to because of the following informalities:

- (a) claim 23 recites the limitation "said high-resolution detector" in line 3 (there is insufficient antecedent basis for this limitation in the claim);
- (b) claim 31 recites the limitation "said high-resolution detector" in line 3 (there is insufficient antecedent basis for this limitation in the claim);
- (c) claim 35 recites the limitation "said data file information" in line 1 (there is insufficient antecedent basis for this limitation in the claim);
- (d) claim 36 recites the limitation "said data information" in line 1 (there is insufficient antecedent basis for this limitation in the claim); and
- (e) claim 37 recites the limitation "said known chemical elements" in line 1 (there is insufficient antecedent basis for this limitation in the claim).

Appropriate correction is required.

## Allowable Subject Matter

- 2. Claims 1, 18-22, 24-26, 28-30, 32-34, and 38-41 are allowed.
- 3. The following is a statement of reasons for the indication of allowable subject matter: the instant application is deemed to be directed to an nonobvious improvement over the invention patented in US Patent 4,278,885. The improvement comprises in combination with other recited elements, calibrating from said single spectrum, an energy scale based on energies within said single spectrum of neutron-induced gamma rays generated from said detector, shielding materials or container material.

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### Conclusion

4. This application is in condition for allowance except for the following formal matters: the claim objections noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shun Lee whose telephone number is (703) 308-4860. The examiner can normally be reached on Tuesday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

DAVID PORTA

SUPERVISORY PATENT EXAMINER

TECHNOLOGY STATE

SL July 22, 2003